

4/30/86 3:40 p.m. Kumar ~~me~~ gave him 5/20 as date I will send out comments + address the depth of cover issue
- he said that Russ Diefenbach said that 24" is OK
- he said there are two areas at the site - one of flyable AB and one of bound AB - may want different cover for each

5/5/86 - see if need to do action memo for add'l funding for Johns Manville - ask Rodney if all work is to be done by PRPs, and if not, if U.S. EPA has allotted sufficient funds for oversight, sampling, etc.

5/6/86 - 3:50 p.m. John Dirgo (PRC) called re: TES II WA234
- he said PRC has reviewed the RI, attended several meetings, looked at the 1st draft FS
- they are preparing a monthly report and wanted to know the status of EPA's upcoming requirements for the contract
- the remedy proposed by KMA seemed OK to PRC, except the cover dispute (thickness) - they looked at EPA requirements on similar sites - anywhere from 24" - 36" cover
- there are 50 hrs left on the contract - that's 90% of for reviewing revised FS and maybe, ^{attending} one public meeting
- period of performance ends 5/15, ∴ need to renew if this contract is still needed - ask Rodney about this + get back to John
- he has a good file on the site if I need copies of anything

5/15/86 4:30 p.m. Kumar Malhotra
- he asked where I was in the review process
- I said that I'll still try to make the 5/20/86 target for sending my comments
- he asked if I've seen ~~around~~ site - no - he said I should see that much of the asbestos is bound/not hatched

- there's another asbestos site in Globe, AZ
- I said that I need to discuss the cover thickness issue w/ other people before making a recommendation

5/19/86 3:55 p.m. John Dingo (PRC)

- informed him that I'll cancel PRC oversight contract on J-M + told him to cease sending monthly reports after May report
- he'll be available for quick questions + he has copies of all that PRC has done on the project

5/19/86 discussion w/ Rodney Daiter

- Rodney's and PRC's comments are in correspondence file
- reiteration of relevant events in recent past: Babette received his comments; a meeting was then held w/ Babette + Norm; conference call w/ IEPA was held; IEPA sent packet of paper explaining their regs
- ➔ need to find mean frost depth
- ➔ develop comments

5/20/86 4:25 p.m. Paul Droulx - Region I

- has 15 J-M sites in region
- ~~so far~~, 10 of these were ~~and~~ "removal" actions that have been undertaken - all were accomplished by covering the sites with 30" of cover with vegetation
- bound asbestos w/ friable - he said he hasn't seen any that doesn't break down w/ time

6/2/86 4:20 p.m. Paul Droulx

- he doesn't know mean frost depth for ~~the~~ area of asbestos sites in Region I - he'll get back to me on this

- his comment regarding length of schedule for completion of RA - it could be shortened by 6 months
 - criteria for selecting 30" cover - due to mean frost depth - provide frost depth was brain

- Alex Iskander (COE) - recommended 12" topsoil
 - 00 min. cover for promotion of vegetative growth and
 - minimization of erosion, and another 18" sandy soil to
 - minimize ~~soil~~ freeze thaw effects
 - 36" so ~~max~~ depth of frost impacts, 30" was
 recommended for 50-100 year life

- his suggestion - 30" would be OK for J-M - Waitegan
 site
 - will send copies of phone memo w/ COE + COE study
 - composition of 30" cover - 6" sandy loam, 6" sand,
 18" sandy silt gravel

- contact: Phillip Boxell (8-223-0400), regional ~~of~~ ^{manager}
 - has affidavits from COE that 30" is min. cover for
 protection of environment

6/2/86

10:50 a.m. Kurt Neiberg

- also see Koppes Action Sheet
 - has now replacing Jeff Jensen as EPA person on J-M
 - EPA concerns - want clay in cover, 24" thickness
 - on a membrane to limit infiltration
 - also want no trees in veg. cover + compaction

6/4/86

9:45 a.m. Boxell

- the 30" thickness requirement was based on mean
 frost depth, not policy - based on COE Cold Region
 research

- the selection of 30" was the result of a study that applied the best engineering judgement of COE

corps contacts: Richard McGaw - thickness

8-834-8445

Alex Iskandar - soil materials, cover life

8-834-8394

- will send me copies of memos from COE regarding this subject

6/4/86 2:20 p.m. Neibergall - also see Koppers action sheet
- set up conf. call w/ Kurt + Jeff Larson to discuss Larson's comments - later today

6/4/86 2:50 p.m. Paul Droulx
- in Region I area - mean frost depth = 16" => five times in 10 years will go that deep
- 36" => one time in 10 yrs will go that deep
contact on depth aspects: ~~Richard~~ McGaw (603) 643-2650
- former COE employee used as expert in RI litigation
- basis for 30" selection 50-100 yr. life of cover
- Paul sent me some info yesterday

6/4/86 3:10 p.m. Conference Call w/ Kurt Neibergall and Jeff Larson - discussion of Larson's I-M FS comments
- 36" depth OK w/ IEPA; they're concerned with specs for type of soil used - want to hold to their directives (design criteria) of no more than 50% by weight sand and no less than 5% by ~~wt~~ wt. clay - 90% compaction also recommended - additional design criteria recommended by IEPA: sieve sizes (soil) should be considered, spinning

- dike comment (#14), should be no trees in vegetative cover
- IEPA wants me to cite their applicable law (~~Subtitle~~ ^{title} 35, ~~the~~ Subtitle G, etc - 24" suitable cover requirement) in my comments
 - other comments:
 - dike slope comment: this is a standard opinion - no specific ^{regulation} requirements for this
 - #17 - visibly clean idea not good in practice - sample should be done - what's clean?
 - #19 - in my comments, make these sentences declarative and state as a recommendation
 - #21 - same as above - put in my comments as a recommendation
 - suggestions by IEPA:
 - if costs for covering get out of sight, may allow geotechnical fabric to replace a given thickness of soil
 - engineering study possibly beneficial
 - should check RCRA closure requ.
 - I will get back to IEPA on 1) U.S. EPA final verdict on cover thickness & 2) appropriateness of putting detailed design criteria in my FS comments - may want to discuss @ a later stage instead

6/4/86 Discussion w/ Russ

- can discuss specifics of cover design w/ S-M over the phone after I send my comments in
- put 36" in as recommendation in my comments - when discuss w/ them, say that if they want to undertake an engineering study to prove adequacy of a lesser thickness, then will abide by the results of

said study.

6/4/86 4:30 p.m. Kumar.

- asked about status of comments
- said comments in typing + a few loose ends left to tie up
↳ gave 6/10 as date for sending comments out
- he suggested meeting after I send comments - I was in agreement

6/6/86 discussion w/ RCRA ~~person~~ personnel

- asbestos is not a HW, so there are no regulations on closure - look to state requirements

6/6/86 9:35 a.m. Kurt Neiberger

his comments on

- J-M comments - U.S. EPA guidance "Evaluating Cover Systems for Solid and Hazardous Wastes" should be consulted - a diagram represents avg. annual max frost depth + the text recommends to add one foot to these values to get final cover thickness - an IEPA/RCRA person said 42" maybe appropriate per this guidance

- IEPA, SW-867, Sept 1982 - no compaction requirements are in process of getting 90% ^{std. practice} compaction requirement for non-haz. waste (90% is std. value)

- I said I'd remove the comments regarding specific design criteria and leave in the two applicable requirements: 36" thickness from U.S. EPA policy + 5% clay, 50% sand IEPA "requirement" + I will cite applicable IEPA reg (24" req) - I will state that design details are of concern to both agencies + will

6/6/86 10:55 p.m. Kurt

- asked him if 5%, 50% IEPA requirement is one that is enforceable thru legal avenues, since it is not part of actual regulation (\equiv 24" req) ~~will get back to me~~
- 11:20 a.m. he called me back - all facilities must comply w/ 5%, 50% requirement or a permit is not issued
- IEPA feels strongly about these requirements for design, but they look @ it from a site-by-site basis
- also mentioned that it would be a big mistake if I didn't consult "Eval of Cover Systems for S+H W" when ~~get~~ deriving final thickness recommendation

6/9/86 9:20 a.m. Babetto

- asked: should I state IEPA rules in my comments & what is legal strength of IEPA design criteria?
- she said a meeting has already been held on this subject & Norm said that J-M doesn't have to comply w/ state law, only federal, but ~~we~~ agreed to put state requirements in ~~our~~ ^{our} comments,
- she agreed that what I was doing was OK, ~~not~~ putting in ^{state} non-regulatory requirements and excluding state regulations satisfied by U.S. EPA ~~require~~ requirements.
- she did not know if the 5/85 OSW guidance has since been updated

6/9/86 3:15 p.m. John Dings (PRC)

- asked if OSW guidance PRC cited in their comments was what I had in file \checkmark confirmed - it was prepared by GCA
- U.S. EPA Approach to Asbestos Enforcement - Debbie Dalton (EPA) was involved - will send me a copy

of this paper

- regarding frost line - he called different ~~co~~ companies and entities - got numbers for frost depth ranging from 30" to 5'

6/9/86 3:30 p.m. Bob Brown? - HQ

May 1985 / asbestos Masterplan

- asked if any updates or changes to OSW guidance
- none; what I have is the present form

6/11/86 4:40 p.m. Kumar Malhotra

- told him I recommended 36" cover thickness in cover letter + that U.S. EPA and IEPA have directives for design criteria
- he said, in light of 36" requirement, the Risk Assessment may point to the no action alternative
- scenario: J-M goes to bankruptcy court with a request for \$ and a description of purpose + reasons for the project - bankruptcy court either grants or denies the \$ request
- discussed the basis for selection of 36" - the guidance document and the frost depth research - said precedent was set in ct. in Region I for 30", based on COE research
- discussed possibility of mtg. ^{in near future} to discuss thickness of cover + design criteria
- said that my comments were sent today

6/19/86 ~ 9:30 a.m. Kate Bloom (HQ) ^(a secretary)

- she said J-M called her + asked her for the OSW guidance and the COE study and told her not to tell me about the request.

6/19/86 10:20 a.m. Kumar

- went thru my draft FS comments - he thinks the comment on p. 2-16 should be referencing ~~lead~~ ^{asbestos}, not Pb - ~~the~~ the monitoring data has not shown elevated Pb levels
- p. 2-17 comment - he said subsurface soil samples were taken
- p. 3-1 - same as for p. 2-16 comment - Pb levels are in dispute
- p. 3-12 & 5-2 - RI lists toxic properties of Pb
- p. 4-4, §4.2.1.3 - wanted to know if the 1:3 slope applies to sanitary landfills
- p. 4-6, 1st IP - he said he sent Rodney the ~~revised~~ ^{amended} pages for insertion
- p. 4-9 - I said this was IEPA's comment - Kumar said it's cheaper for J-M to continue the use of its present syst
- scoring comments - said the values are somewhat subjective
- cover issue is main issue, the rest of the comments can be addressed
- ⇒ - he wanted applicable design criteria, so he can get going while thickness issue is negotiated - thicker cover will not take time from a specifications standpoint
- ⇒ check on all of Kumar's statements regarding my comments

6/19/86 - Larry Johnson - ORC - said 8/15/86 is drop dead date for RD/RA negotiations

6/23/86 2:30p.m. Marvin Clumpus

- he sent a letter to me this morning asking for copies of documents cited in my comment letter
- J-M will review these documents and then call to meet on cover thickness issue - basically had no problems w/ my other comments

6/26/86 4:40p.m. Kumar

- wanted copies of design guidance + documents referenced in my comment letter
- he'll stop by Wednesday ^(7/2) to pick up documents I've copied by then

6/27/86 12:10p.m. Paul Droulx

- I asked for the COE report + proof of the fact that 30" was used on ^{the} other sites (10 sites total - 30" used at all 10)
- he said he's sent me what he has - the immediate removal equivalent of a ROD is an OSC report - there are presently 7 reports (one for first seven sites, one for #8, and one for #9, one for #10, which are presently in draft form) - all sites are in New Hampshire, what he sent me is the report for the eighth site
- he'll send me a copy of the report for the first 7 sites - he said to see attachment 4A of the report and to note that some of the initial recommendations have subsequently been revised; all eventually used a 30" cover thickness with vegetation

6/30/86 9:00a.m. Kurt

- confirmed that I have copies of all IEPA design

6/30/86 1:15 p.m. Tony Restaino

- he said there is no ^{U.S. EPA} design criteria for the covers ^{used for} asbestos materials, to his knowledge

6/30/86 1:20 p.m. Sheri Bianchin and Bruce Kerner (Air Division)

- both said there were no design criteria or guidance for the covers used for AB materials

- Bruce referred me to:

Limbo Roy - 8-629-5578 - developed ^{the} NESHAPS ^{AB} nego

John Copeland - 8-629-5601

7/3/86 9:25 a.m. Kurt

- said I EPA had no problem with U.S. EPA sending state draft design criteria to J-M

7/7/86 Richard Mc Dow 9:55 a.m.

- he said selection of cover thickness was based on the worst winter in 10 and the exposure of the area (vegetative cover)

- at Nashua - Hudson - 30" was chosen from the standpoint of the 1 in 10 frost idea and costs

- titles - Alex Iskandar - soil chemist

Richard Mc Dow - civil engineer w/ specialty of frost depth

- he said CRRL (-Cold Regions Lab) is very costly (160% overhead) and we may not want to go through them to get contract

- he is available to perform such a contract for U.S. EPA

- he said the 6" NESHAPS thickness came from the Soil Conservation Service as the minimum thickness

required to sustain vegetative growth

- Richard W Mc Dow
Consulting Civil Engineer
30 Rayton Road
Hannover, NH 03755

8-603/643-2650

=> need to call National Weather Service and have them send monthly report on freeze indices - get exact frost depth for Waukegan area

7/8/86 5:00 p.m. Dr. Silicoff

referred me to: William Nicholson, Ph.D. - Mt. Sinai (212) 650-5822
- for health effects at given concentrations
Dr. Henry A. Anderson - Wisconsin State Dept of Health (Madison), Bureau of Community Health - (608) 266-1253 - for health effects in general

J-M discussions of Norm:

- RD/RA negotiation dropdead date must be reset
- => need to put clause in case plan about preparing a draft RD/RA Order
- => get contractors on board ASAP
 - > give Fred Norling a 50w w/ \$ + hours; give primary contact, deliverables + duration
 - can get AB health effects expert thru REM or CH₂M Hill

7/15/86 8:25 a.m. William Nicholson

Division of Environmental and Occupational Medicine
Mount Sinai School of Medicine
1 Gustave-Levy Place
New York, New York 10029 (212) 650-5822

- he said he wrote a relevant document for EPA - "Airborne Asbestos Health Effects Update"
 - he said: his certificate + had no problem with being "on call" for possible testimony, but that he needs EPA to define what is at issue - he'll testify on health effects but not on core thickness, which seems to be at issue

7/20/86 - see revision to 7/7 case plan
 - meeting w/ Field + Norm - see notes on 7/7 case plan about
 => must get McLean on board

7/22/86 2:10 p.m. Clumpus
 - said due to reactions + complicated nature of their response to the core thickness issue, the meeting (to discuss core thickness) will have to be at the end of August - will call on Aug 5 to firm up a date
 3:00 p.m. - left message for Clumpus to call me the week of Aug 11 to firm up a date

7/24/86 Case Plan + Revised Case Schedule mtg w/ Norm
 - see mtg notes
 => need to meet w/ ORC to get them to commit to dates for the relevant items

7/24/86 2:05 p.m. McLean
 - cost for his + Alex + Abraham's services = \$50/h
 - could prepare conceptual design - Alex comes - his fee is \$117 - \$17 for site visit

9/16/86 phone conversations update

Meeting and Site Visit

7/22/86 at 2:10 p.m. call of Clumpus, 7/22/86 at 3:30 p.m. message to Clumpus, 8/11/86 at 10:10 a.m. of Clumpus, 8/12/86 of Johnson, 8/12/86 at 10:15 a.m. of McGaw, 8/12/86 of Johnson, 8/13/86 at 3:10 p.m. of Clumpus, 8/14/86 at 2:05 p.m. of Clumpus, 8/15/86 at 10:15 a.m. of McGaw, 8/15/86 at 10:20 a.m. of Neibergall, 8/19/86 at 11:15 a.m. of Neibergall, 8/19/86 of Johnson, 8/19/86 at 8:55 a.m. of McGaw, 8/19/86 at 9:35 a.m. of Clumpus, 8/19/86 at 10:10 a.m. of Dean Olmstead (623-2900 - J-M, Waubesa), 8/20/86 at 8:45 a.m. of Neibergall, 8/20/86 at 4:40 p.m. of McGaw, 8/18/86 at 1:15 p.m. of Olmstead, 8/18/86 at 5:20 p.m. of McGaw, 8/22/86 at 2:00 p.m. of Neibergall, 8/27/86 at 11:25 a.m. of Olmstead, 8/27/86 of Johnson, 8/27/86 at 1:00 p.m. message to McGaw, 8/27/86 3:30 p.m. of Neibergall, and 9/11/86 at 9:45 a.m. of Clumpus

- all of these calls resulted in the site visit being scheduled for 9/10/86 at 9:00 a.m. and the meeting being scheduled for 9/12/86 - Jim Scott was the contact for the ~~site~~ inspection

directions: (94) to (132) - go east a few miles - next to Lake - left on Sheidans Rd - ~ 1 mile take right on Greenwood - take you by J-M entrance - the scope of the mtg changed from cover thickness negotiations to a site question and answer session after the site visit indicated the need for answers to many questions - a list of participants in the mtg was given by both IEPA and J-M - the strategy put forth by EPA was - see 9/10/86 site visit report + 9/12/86 mtg. summary to separate

FS offers + thickness negotiations - FS will be finalized w/ remedy to EPA will attach an addendum reflecting its suggested remedy prior to going final (public) w/ FS

Expert Consultant Contract

a) contract initiation + approval

7/24/86 at 2:05 p.m. of McGaw, 7/30/86 at 9:15 a.m. of McGaw

at 4:10 p.m. w/ Kurt Samble (FTS 382-4850), 8/13/86 at 10:50 a.m.
w/ Mr. Gaur, 8/14/86 w/ Samble, 8/25/86 at 11:00 a.m. w/
Linda Brown, (DM), 8/27/86 at 9:40 a.m. w/ Linda Brown,
9/8/86 at 9:25 a.m. w/ Linda Brown - mfr on consultant
Richard McGaw
SS # 298-24-3990
394-58-8804
(603) 448-3927 07-3524

~~at 7/30/86 50w for contract for~~
cost agreed on \$50/hour - Alex will come in as subcontract
in conceptual design phase - the vehicle to get Mr. Gaur
in as expert (code entered) used to get his name in
Kurt Samble (DWP, WH-527, U.S. EPA, 401 M St. SW, Washingto
D.C. 20460) computer system, from there, DM draw his name
from said system along w/ other qualified individuals
and sent me a list. When made my recommendations
- after some delay, Mr. Gaur's name got in system + all
went well to get an expert ~~from~~ in-house, must
fill out Expert Request Form (very detailed) + send to bank
EPA presently has 12 health science experts for selected air
system, several of which are within EPA + NIOSH - just
for cost estimate - 6% for most work, 12% for cost estimating
+ preparation - an error in the original 50w was corrected
by having COM submit a description to HQ indicating 112
expert witnesses hours (originally announced 10E) and their
estimate of 10E (210%)

=> a letter of intent to Mr. Gaur (DM's responsibility) is all
that's needed to make the contract effective
b) date gathering for Mr. Gaur
8/13/86 at 3:40 p.m. call w/ Mr. Gaur, 8/15/86 w/ Neil Weather
Service representative (298-1413), 8/15/86 w/ Kathy Good (991-1160)

at 4:10 p.m. w/ Kurt Samble (FTS 382-4850), 8/13/86 at 10:50 a.m.
w/ Mr. Gaur, 8/14/86 w/ Samble, 8/25/86 at 11:00 a.m. w/
Linda Brown, (DM), 8/27/86 at 9:40 a.m. w/ Linda Brown,
9/8/86 at 9:25 a.m. w/ Linda Brown - mfr on consultant
Richard McGaw
SS # 298-24-3990
394-58-8804
(603) 448-3927 07-3524

Mc Dow, 8/20/86 at 2:30 p.m. w/ Natl Weather Service representative, 8/22/86 at 9:15 a.m. w/ Bass, 8/22/86 at 9:35 a.m. w/ Celeste, Chicago Botanic Garden, 9/8/86 at 3:25 p.m. w/ Natl Weather Service representative - Mc Dow asked for: 1) copy of draft FS + my comments - sent, 2) freeze indices for last 30 years - called Natl Weather Service (298-1413) - would only give 30 yr averages over phone (# days under 32° = Jan-29, Feb-26, March-21, April-8, May-1, June-Aug-0, Sept-1, Oct-5, Nov-17, Dec-26) - went to weather station itself (10600 West Higgins Road - Room 610, ^(just W of Mannheim Rd)), data I gathered (see 9/9/86 data) wasn't sufficient = I forgot degrees, Mc Dow needed degree days, so Mc Dow gathered it from our EPA library (RI), 3) frost line depth for Waukegan - Kathy Bass gave this figure as 35" - Bass + Celeste couldn't help me w/ freeze indices

Miscellaneous

- 8/14/86 w/ Johnson, 9/4/86 at 3:50 p.m. w/ Johnson = Larry initially told me to lay low for a while due to bankruptcy court actions + avoidance of having EPA claim against J-M discharged - he then told me to go full speed ahead
- 8/25/86 at 2:05 p.m. and 8/27/86 at 10:50 a.m. w/ Kerry Scarlott, Kirkland & Ellis, 655 15th St. NW, Washington, D.C. 20005 - his firm is looking into what types of remedial responses are appropriate for asbestos sites - he requested a copy of the final RI for J-M - I told him to go thru FOIA process - contact: Bob Martian - also said to contact Paul Brault, RI (Region I) for further AB remediation info
- 9/9/86 at 4:00 p.m. w/ Sims Roy (8-629-5578), HQ - discussed

2021
8/19-5/69

suggested in the negs is intended to last longer - than maintenance

negs:

present - active site - 6" daily	inactive site - 24" or	proposed revisions
active - 6" daily	inactive - 36" or	active - 36" or
		(find class) - 18" or
		neg of neg
		temporarily inactive

- the present requirements would apply to old sites that lessons
- inactive prior to promulgation
- handle the inactive after promulgation (18 or 89) - 36" compar
- proposed of neg - this is recommendation